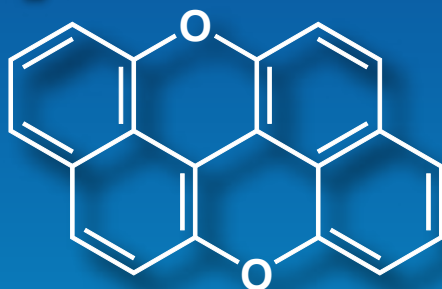


New

MATERIALS



Organic Photoredox Catalyst for O-ATRP and PET-RAFT Polymerization



peri-Xanthenoxanthene

1g

[X0083]

Advantages

- Applicable to metal-free polymer synthesis by organocatalytic atom transfer radical polymerization (O-ATRP) and photoinduced electron/energy transfer reversible addition–fragmentation chain transfer (PET-RAFT) polymerization.
- Polymerization can be controlled by visible light ($\lambda_{ab, max} = 443\text{nm}$).
- The high stability allows polymerization to proceed at low catalyst concentration.

References

- 1) Metal-free atom transfer radical polymerization with ppm catalyst loading under sunlight
Q. Ma, J. Song, X. Zhang, Y. Jiang, L. Ji, S. Liao, *Nat. Commun.* **2021**, *12*, 429.
<https://doi.org/10.1038/s41467-020-20645-8>
- 2) Organocatalytic PET-RAFT polymerization with a low ppm of organic photocatalyst under visible light
Q. Ma, X. Zhang, Y. Jiang, J. Lin, B. Graff, S. Hu, J. Lalevee, S. Liao, *Polym. Chem.* **2022**, *13*, 209.
<https://doi.org/10.1039/D1PY01431E>

See more information for
Visible Light Photoredox Catalysts
<https://bit.ly/3PHj6by>



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